Claims

1-9. (canceled)

10. (currently amended) The ~~method of claim 8~~ transition of claim 36, wherein the ~~characteristic~~ impedance of the airline is about 50 Ohms ~~and the transmission line is a coaxial cable~~.

11-34. (canceled)

35. (currently amended) The transition of ~~claim 1~~ claim 36, wherein the impedance of the airline is substantially defined by dimensions of the ~~housing~~ airline cavity and the airline conductor.

36. (previously presented) A transition for delivering an electrical signal propagating on a coaxial cable to a substrate, comprising:

a coaxial input configured to receive a coaxial input waveguide;

an airline defined by an airline conductor and an airline cavity;

an interconnect conductor situated in the airline cavity and configured to electrically couple a substrate to the airline conductor; and

a coaxial output configured to receive a coaxial output waveguide, wherein the airline conductor extends from the coaxial input to the coaxial output, and the airline is configured to have an impedance that substantially matches an impedance of at least one of the coaxial input waveguide and the coaxial output waveguide.

37. (previously presented) The transition of claim 36, wherein the cavity is cylindrical.

38. (previously presented) The transition of claim 36, wherein the interconnect includes a conductive puck.

39. (previously presented) The transition of claim 36, wherein the substrate is retained by the housing.